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Dr. Joshua Lederberg The Rockefeller University 1230 York Ave. New York, NY 10021

Dear Josh,

I am happy that we will be able to meet on February 10 at 4:00 PM. With some trepidation, I enclose the early chapters of my book. Also enclosed is the Preface and two pages of notes to reviewers. I also enclose a detailed outline, so that you will know the scope. I have had to make a hard decision on the length of the book. Once I had the draft finished, I realized that the book would be too long if I included the history of the genetic code, plasmids, recombinant DNA, etc. Therefore, I am restricting the book to bacterial genetics in the strictest sense and to those areas where bacterial genetics played a crucial role. There are difficulties in deciding how much biochemistry and physiology to include. So, PaJaMo and its sequelae stayed, but Nirenberg did not (except by inference). I really feel the book cannot be too much longer than it is, even though certain areas are being slighted. On the other hand, I am willing to be persuaded, and to delete material that reviewers think not worth covering.

I am a little embarassed about the current title, since it implies some really expert treatment, but on the other hand, I mean to separate this book from other histories of modern biology which are by no means definitive. If you feel I am being too boastful, I will be happy to entertain alternatives.

As I continued to write this book I occasionally asked myself why I felt I was qualified to do it. Although I have done a little genetics and phage work, and grew up through the later part of the era being covered (I took the bacterial genetics course at Cold Spring Harbor in 1958, when Demerec was still active), I am by no means a geneticist. I am not actually a historian either. But I do know how to put a book together, and I believe that the book I am doing will be more useful than one done by an insider. Indeed, the objectivity that I can bring to bear may itself be useful.

I have covered your work in numerous places and in numerous ways. Certainly you are featured in Chapters 4 and 5, but also in Chapters 8 and 10 which I will send you later. I hope you do not mind that I have included a few negative comments and items from the Hayes/Jacob/Wollman era, since it is all "water over the dam" now, and is essential to keep the history balanced. If you really object to anything I say, please let me know and I will rewrite it.

One of the most interesting things coming out of this project, for me, was a realization of how the belief that bacteria were simply smaller versions of plant and animal cells affected thinking about bacterial genetics. This was true not only in your own work, but in Delbrück's work on phage. I think not enough has been done by historians of biology with the utter uniqueness of bacteria.

Another area that has fascinated me is how terminology has changed with time and usage. Certain words (episome, sexduction, merozygote) have almost vanished, whereas other words (transduction, plasmid) have taken on new and different meanings. A study of how terminology influenced experiment would be fascinating. However, in my book you will find these things mentioned only by indirection.

I had intended to wait until I had the whole manuscript ready before sending you this material. But my sudden need to visit New York has altered my plans. However, the whole manuscript (except for the Summary chapter at the end) is written, and so I know the scope of the book. I should have the rest ready for reviewers in a few weeks.

I plan to send separate chapters to specialized reviewers. I am assembling a list and I would welcome your suggestions. When we meet February 10 I hope we can talk about my general approach and overall areas of weakness. I hope that at some time you will be able to provide me with written critical comments directly on the manuscript, but that would not be necessary for a while. Experience has shown that reviewers take quite a few months, so I do not expect a final revision ready for the typesetter until next fall.

Among other things, I hope you might have some ideas of a publisher. There are several university presses, of course, but it occurred to me that Cold Spring Harbor or Rockefeller Press might be more suitable, given the focus of the material. Chapter 9, of course, has Rockefeller on almost every page, and the spirit of Cold Spring Harbor pervades the book.

Please call me if any change in your plans for February 10 arise.

The Brock
Thomas D. Brock

E.B. Fred Professor of Natural Sciences